



## Appendix C: Population Count Estimates

### Appendix C: Population Count Estimates Used in the Report

Producing this report using data from 1998 through 2003 has presented a significant challenge because computing rates requires estimates of population size, and the 1997 OMB Standards (see Appendix B) were implemented by the U.S. Census Bureau in 2000, whereas data from our various health data sets converted to the standard at different points in time.

Prior to the 2000 U.S. Decennial Census, the race estimates were reported in a rather simple table (see U.S. Decennial 1990 Census table, below).

U.S. 1990 Decennial Census (April 1990) Utah Population Estimates  
by Race and Hispanic Ethnicity

<b>Utah</b>	Not of Hispanic Origin	Hispanic Origin	Total
White	1,571,254	44,591	1,615,845
Black	10,868	708	11,576
American Indian, Eskimo, or Aleut	22,748	1,535	24,283
Asian or Pacific Islander	32,490	881	33,371
Other Race	893	36,882	37,775
<b>Total</b>	<b>1,638,253</b>	<b>84,597</b>	<b>1,722,850</b>

After the 2000 U.S. Decennial Census, the race estimates were reported in a table that was much more complex (see 2000 Census Table QT: P5, below).

U.S. 2000 Decennial Census (April 2000) Utah Population Estimates  
by Race and Hispanic Ethnicity

<b>Utah</b>	Not Hispanic or Latino	Hispanic or Latino	Total
Persons who reported only one race			
White	1,910,512	189,699	2,100,211
Black or African American	16,572	2,798	19,370
American Indian or Alaskan Native	26,891	4,263	31,154
Asian	37,531	1,093	38,624
Native Hawaiian or Other Pacific Islander	15,230	754	15,984
Total: Persons who only reported one race	2,006,736	198,607	2,205,343
Persons who reported two or more races	24,874	2,952	27,826
Race alone or in combination:(1)			
White	1,933,459	192,430	2,125,889
Black or African American	21,814	3,578	25,392
American Indian or Alaskan Native	35,115	5,887	41,002
Asian	47,197	1,842	49,039
Native Hawaiian or Other Pacific Islander	20,517	1,110	21,627
<b>Total - All persons</b>	<b>2,031,610</b>	<b>201,559</b>	<b>2,233,169</b>

(1) 'In combination' means in combination with one or more other races. The sum of the five race groups adds to more than the total population because individuals may report more than one race.

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To confuse the matter further, a method was derived in which population estimates from later years could be bridged back to the earlier coding scheme. This “bridging method” assumed that if an individual reported only one race, it was their primary race. Individuals who reported more than one race were distributed into their respective presumed primary race categories based on an algorithm developed by the Census Bureau.

Since most of our numerator, or health event, data spanned a period that included the year 2000, it was decided that we could use the year 2000 census data for population estimates for the calculation of rates. Since we typically use mid-year (July 1) population estimates to calculate rates for health events, we selected to use the July 1, 2000 Utah population estimates by race and Hispanic ethnicity.

We preferred the new OMB standard because it separated out our Asian and Native Hawaiian/Pacific Islander populations. But the new method also produced a troublesome “two or more races” category, which was present in virtually none of our numerator data sources. The likelihood of reporting “two or more races” was higher among persons reporting a non-White race. Ignoring that group entirely would underestimate the number of persons in the population denominator, and would underestimate denominators disproportionately more in non-White races compared with White. The resulting statistical artifact would make health disparities appear to be greater.

The selected solution was to use bridged race estimates for July 1, 2000, but to manually separate out the Asian and Native Hawaiian/Pacific Islander populations. This was done using the following logic.

The total bridged number of Asian and Native Hawaiian/Pacific Islanders, according to the 2000 Census Bureau bridged race estimates was 59,348. This included 37,108 Utahns who reported an Asian race and no other race, and 15,145 Utahns who reported Native Hawaiian/Pacific Islander as their sole race. That left 7,095 Utahns who were placed in the “Asian or Native Hawaiian/Pacific Islander” bridged race category because they had reported two or more races on the Census form. We made the assumption that if those 7,095 Utahns had been bridged separately into an Asian versus a Native Hawaiian/Pacific Islander category, that the percentage distribution would be the same as it was for those reporting only one race. Since population data were needed by sex and age, the populations were partitioned by sex and age for 23 different age groups, and the logic was applied to each age/sex group.

The following population estimates for Asian and Native Hawaiian/Pacific Islander groups resulted from the process just described.

	Reported One Race Only	Reported More Than One Race	Total Estimated Population: New Bridged Estimate
Asian	<i>37,108</i>	<i>4,758</i>	<b>41,866</b>
Native Hawaiian/Pacific Islander	<i>15,145</i>	<i>2,337</i>	<b>17,482</b>
Total	<i>52,253</i>	<i>7,095</i>	<b>59,348</b>

Italicized numbers were supplied by the U.S. Census Bureau. Numbers that appear in boldface type were the estimates used in this report.